

Before the

Federal Communications Commission  
Washington, DC 20554

In the matter of

Amendment of the Commission's Rules  
Regarding Multiple Address Systems

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WT Docket 97-81

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**COMMENTS OF PUBLIC SERVICE COMPANY OF NEW MEXICO**

Public Service Company of New Mexico respectfully submits the following comments in response to the Commission's Notice of Proposed Rule Making released in the above-captioned proceeding February 27, 1997

**1. BACKGROUND**

Public Service Company of New Mexico (PNM) is an investor owned public utility engaged in the generation, transmission and distribution of electrical energy for use by the general public. PNM has been operating a 928/952 MHz Multiple Address Radio System (MAS) in the Albuquerque, New Mexico metropolitan area since 1992. PNM recently received a license to expand the current system into our East Mountain Division, and has licenses pending for an MAS system in Santa Fe, New Mexico and a backup system for Albuquerque. These MAS systems provide the communications link for a Supervisory Control and Data Acquisition (SCADA) system which allows PNM operators to remotely monitor and control the electrical distribution system. MAS master stations communicate with remotes located at various distribution substations, line switches and capacitor banks located throughout PNM's service area. The MAS radio system is a crucial link in PNM's ability to provide reliable service to its customers, faster response to system problems, and an enhanced level of public safety. Consequently, PNM believes that its use of the MAS frequencies serves the public interest.

**2. TREATMENT OF 928/952/956 MHZ BANDS**

These frequencies are essential to PNM's business operation. They are totally dedicated to PNM's internal SCADA operations and serve no commercial purpose what so ever. PNM's use of the MAS band is application specific, protocol specific and virtually real time. All remotes are continuously scanned, leaving no time to insert other applications or provide service to other users. Sharing a frequency with a commercial operator or common carrier would be technically unfeasible. Therefore, we support the Commission's proposal to retain these channels for private use only.

PNM believes the frequency coordination and licensing rules for the MAS band should be more stringent. Many users of MAS frequencies do not go through formal frequency coordination. Proposed frequencies are not put on public notice, thereby denying existing users the ability to analyze new applications for potential interference. Adjacent channel users should be taken into account as well. Existing receivers have limited adjacent channel discrimination.

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We oppose permitting mobile and point-to-point operations on these channels on a co-equal basis. The MAS band was designed with a specific purpose in mind; point-to-multipoint, addressable operations. It is precisely this application that makes MAS so attractive for electric, gas and water utilities.

### 3. TREATMENT OF 932/941 MAS CHANNELS

The existing 928/952 MHz MAS frequencies are already in short supply in many areas of New Mexico. PNM believes that additional spectrum is needed to satisfy the growing need for these channels. All or part of the 932/941 MHz band should be reserved for private user MAS operations. Perhaps part of this band could be assigned for mobile and point-to-point applications. If this is done, the two applications should be given some frequency separation to avoid adjacent channel interference.

### 4. GEOGRAPHIC LICENSING

We do not support geographic licensing for private systems. While it would be convenient to be able to move master stations at our discretion, we believe it would create untenable problems for frequency coordinators and lead to increased levels of interference. It has been our experience that some users of the MAS frequency band already feel free to move master stations to improve coverage. In the fall of 1996 PNM's SCADA system was knocked off the air for three days by an adjacent channel user who moved a licensed station to an unlicensed location less than ¼ mile from PNM's master station. Finding the source of this problem was a time consuming and frustrating experience.

PNM's MAS application is geographically constrained. The critical issue is not the size of the area served, but rather the separation of co-channel and adjacent channel transmitters/receivers. If PNM were to obtain an EA license, it could restrict other users from reusing the frequency even though no interference would occur. We believe geographic licensing could lead to an inefficient use of the spectrum.

### 5. TREATMENT OF INCUMBENTS

PNM supports the Commission's position on protecting the rights of incumbent licensees.

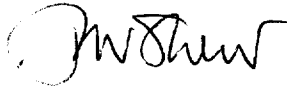
### 6. ENTREPRENEURS

PNM urges the Commission to adopt rules restricting the ability of entrepreneurs to license spectrum for the sole purpose of speculation. A year long monitoring program covering the non-SMR 800 MHz trunking frequencies showed that fully 30% of the 100 frequencies monitored have never been placed in operation. PNM has expended over two years of effort attempting to license 800 MHz channels in the Albuquerque area. To date we have been unable to obtain frequency coordination for even one frequency.

## 7. CONCLUSION

In conclusion, PNM would ask the Commission to take into consideration the internal communication needs of the nation's electric, gas and pipeline utility companies when restructuring the 900 MHz Multiple Address System rules and regulations. These frequencies are critical to maintaining reliable sources of energy for the nation's core industries, small businesses, and homes. PNM believes that a reliable source of energy will play an important role in keeping America competitive in the world market place.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Phil Shew".

Phil Shew  
Communications Engineer

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April 18, 1997